How do I find all files containing specific text on Linux?

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I'm trying to find a way to scan my entire Linux system for all files containing a specific string of text. Just to clarify, I'm looking for text within the file, not in the file name.

When I was looking up how to do this, I came across this solution twice:

```
find / -type f -exec grep -H 'text-to-find-here' {} \;
```

However, it doesn't work. It seems to display every single file in the system.

Is this close to the proper way to do it? If not, how should I? This ability to find text strings in files would be extraordinarily useful for some programming projects I'm doing.

linux text directory find grep

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asked Jun 6 '13 at 8:06



- 29 remember that grep will interpret any . as a single-character wildcard, among others. My advice is to alway use either fgrep or egrep. - Walter Tross Oct 28 '13 at 11:54
- 12 anyway, you were almost there! Just replace -H with -1 (and maybe grep with fgrep). To exclude files with certain patterns of names you would use find in a more advanced way. It's worthwile to learn to use find , though. Just man find . - Walter Tross Oct 28 '13 at 12:01 🖍
- find ... -exec <cmd> + is easier to type and faster than find ... -exec <cmd> \; . It works only if <cmd> accepts any number of file name arguments. The saving in execution time is especially big if <cmd> is slow to start like Python or Ruby scripts. - hagello Jan 28 '16 at 5:16

To search non-recursively in a given path the command is `grep --include=*.txt -snw "pattern" thepath/*. -Stéphane Laurent Aug 15 '16 at 12:34

@StéphaneLaurent I think you are complicating it too much. Just say grep "pattern" path/*.txt fedorqui 'SO stop harming' Dec 2 '16 at 13:13

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grep -rnw '/path/to/somewhere/' -e 'pattern'



- -r or -R is recursive,



-n is line number, and



- -w stands for match the whole word.
- -1 (lower-case L) can be added to just give the file name of matching files.
- -e is the pattern used during the search

Along with these, --exclude, --include, --exclude-dir flags could be used for efficient searching:

This will only search through those files which have .c or .h extensions:

```
grep --include=\*.{c,h} -rnw '/path/to/somewhere/' -e "pattern"
```

This will exclude searching all the files ending with .o extension:

```
grep --exclude=\*.o -rnw '/path/to/somewhere/' -e "pattern"
```

 For directories it's possible to exclude one or more directories using the --exclude-dir parameter. For example, this will exclude the dirs dir1/, dir2/ and all of them matching *.dst/:

```
grep --exclude-dir={dir1,dir2,*.dst} -rnw '/path/to/somewhere/' -e "pattern"
```

This works very well for me, to achieve almost the same purpose like yours.

For more options check man grep.

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answered Jun 6 '13 at 8:21 rakib 25

- use --exclude. like "grep -rnw --exclude=*.o 'directory' -e "pattern" rakib Jun 6 '13 at 8:29 80
- 131 it's worth noting: it seems the r option is lazy (traverses depth-first, than stops after the first directory), while R is greedy (will traverse the entire tree correctly). - Eliran Malka Mar 24 '15 at 15:09
- grep -rnw "String I was looking for" done what I needed. Thanks! ViliusK Aug 19 '15 at 21:20 🎤 6
- 39 Note(especially for newbies): The quotation marks in the above command are important. – madD7 Dec 22 '15 at 12:37
- @Eliran Malka R en r will both traverse directories correctly, but R will follow symbolic links. -79 bzeaman Jul 5 '16 at 8:36

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grep -Ril "text-to-find-here" /



- i stands for ignore case (optional in your case).
- 1
- R stands for recursive.
- 1 stands for "show the file name, not the result itself".
- / stands for starting at the root of your machine.

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edited Feb 23 '16 at 10:02

answered Jun 6 '13 at 8:08



fedorqui 'SO stop harming'

225k 80 461 515

- 98 Based on my experience, the -i makes it slow down a lot, so don't use it if not necessary. Test it in a certain dir and then generalise. It should be completed within few minutes. I think a regular expression would make it slower. But my comments are based on suppositions, I suggest you to test it with time in front of the line. fedorqui 'SO stop harming' Jun 6 '13 at 8:14
- Yes, /* stands for that. Anyway I just tested it and noticed that just / works. fedorqui 'SO stop harming' Jun 6 '13 at 8:15
- 12 If you are not searching using a regex you can use fgrep in place of grep on most systems. markle976 Sep 28 '13 at 14:49
- 10 Yes @markle976, in fact from man grep: fgrep is the same as grep -F -> Interpret PATTERN as a list of fixed strings . fedorqui 'SO stop harming' Sep 30 '13 at 8:23
- 22 You can replace / with path to directory grep -Ril "text-to-find-here" ~/sites/ or use . for current directory grep -Ril "text-to-find-here" . Black Jan 28 '16 at 12:19 ✓



You can use ack. It is like grep for source code. You can scan your entire file system with it.

365 Just do:



ack 'text-to-find-here'



In your root directory.

You can also use <u>regular expressions</u>, specify the filetype, etc.

UPDATE

I just discovered <u>The Silver Searcher</u>, which is like ack but 3-5x faster than it and even ignores patterns from a .gitignore file.

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edited Mar 12 '15 at 12:31



RAJ

.283 1 29

answered Jun 6 '13 at 8:26



Stephan

2.7k 6 45 54

Very useful, simple and fast. Warning: "On Debian-derived distros, ack is packaged as "ack-grep" because "ack" already existed" (from beyondgrep.com/install). You may end up running a Kanji code converter on those Linuxes... – Jose_GD Sep 20 '13 at 13:32

ad and an and man has nice highlights, but find come unbox manner used in much better in newformance